



DEPARTMENT OF THE ARMY
MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-PD-SP

15 OCT 2007

MEMORANDUM FOR Commander, Rock Island District

SUBJECT: Blackberry Creek Watershed Critical Restoration Project,
Project Implementation Report, Peer Review Plan (PRP)

1. References:

a. Memorandum, CEMVD-PD-N, 5 October 2007, subject:
Blackberry Creek Watershed, Ecosystem Planning Center of Expertise
Recommendation for Approval of Peer Review Plan (encl).

b. EC 1105-2-408, 31 May 2005, Peer Review of Decision
documents.

c. Memorandum, CECW-CP, 30 March 2007, subject: Peer Review
Process.

d. Memorandum, March 2007, subject: Supplemental information
for the "Peer Review Process."

2. I hereby approve subject Peer Review Plan and concur with the
conclusion that external peer review of this project is not
necessary for the following reasons: (1) no influential scientific
information will be produced by the study, and (2) the risk was
assessed as low. The proposed PRP has been coordinated with the
National Ecosystem Planning Center of Expertise (ECO-PCX) and
concurred in by the ECO-PCX. The PRP complies with all applicable
policy and provides an adequate independent technical review of the
plan formulation, engineering and environmental analyses, and other
aspects of the plan development. Non-substantive changes to this
PRP do not require further approval.

3. The District should post the PRP to its web site and provide a
link to the ECO-PCX for posting on their web page, as well as
providing a copy of the final approved PRP to the ECO-PCX for their
use. Before posting to the web site, the names of Corps/Army
employees should be removed in accordance with reference 1.d.
above.

CEMVD-PD-SP

SUBJECT: Blackberry Creek Watershed Critical Restoration Project,
Project Implementation Report, Peer Review Plan (PRP)

4. The MVD point of contact is Mr. Terry Smith, CEMVD-PD-SP,
(601) 634-5840.

A handwritten signature in black ink, appearing to read "Robert Crear". The signature is fluid and cursive, with a large initial "R" and a long, sweeping underline.

Encl

ROBERT CREAR
Brigadier General, USA
Commanding

**BLACKBERRY CREEK WATERSHED
CRITICAL RESTORATION PROJECT
PROJECT IMPLEMENTATION REPORT WITH
INTEGRATED ENVIRONMENTAL ASSESSMENT**

PEER REVIEW PLAN

I. PURPOSE AND REQUIREMENTS

This document outlines the peer review plan for Blackberry Creek Critical Restoration Project Implementation Report (PIR) with Integrated Environmental Assessment (EA) and Appendices. Engineer Circular 1105-2-408 dated 31 May 2005, *Peer Review of Decision Documents*:

- establishes procedures to ensure the quality and credibility of Corps decision documents by adjusting and supplementing the review process; and
- requires that documents have a peer review plan. The Circular applies to all feasibility studies and reports and any other reports that lead to decision documents that require authorization by Congress. The feasibility level reports (PIRs) in this program will lead to Congressional Authorization and are therefore covered by the Circular.

The Circular outlines the requirement of the two review approaches (independent technical review (ITR) and external peer review (EPR)) and provides guidance on Corps Planning Centers of Expertise (PCX) involvement in the approaches. This document addresses review of the decision document as it pertains to both approaches and planning coordination with the appropriate Center.

ITR. Districts are responsible for reviewing the technical aspects of the decision documents through the ITR approach. Internal Technical Review is a critical examination by a qualified person or team that was not involved in the day-to-day technical work that supports the decision document. Internal Technical Review is intended to confirm that such work was done in accordance with clearly established professional principles, practices, codes, and criteria. In addition to technical review, documents should also be reviewed for their compliance with laws and policy. The Circular also requires that DrChecks (<https://www.projnet.org/projnet/>) be used to document all ITR comments, responses, and associated resolution accomplished.

EPR. The Circular added external peer review to the existing Corps review process. This approach does not replace the standard ITR process. The peer review approach applies in special cases where the magnitude and risk of the project are such that a critical examination by a qualified person outside the Corps is necessary. External peer review can also be used where the information is based on novel methods, presents complex interpretation challenges, contains precedent-setting methods or models, or is likely to affect policy decisions that have a significant impact. The degree of independence required for technical review increases as the project magnitude and project risk increase.

- Projects with low magnitude and low risk may use a routine ITR
- Projects with either high magnitude/low risk or low magnitude/high risk would require both Corps and outside reviewers on the ITR team to address the portions of the project that cause the project to rate high on the magnitude or risk scale.
- Projects with high magnitude and high risk require a routine ITR as well as an EPR.

PCX Coordination. The Circular outlines PCX coordination in conjunction with preparation of the review plan. Districts should prepare the plans in coordination with the appropriate PCX. The Corps PCX are responsible for the accomplishment and quality of ITR and EPR for decision documents covered by the Circular. Centers may conduct the review or manage the review to be conducted by others. Reviews will be assigned to the appropriate Center based on business programs. The Circular outlines alternative procedures to apply to decision documents. Each Center is required to post review plans to its website every three months as well as links to any reports that have been made public. The Office of Water Project Review (OWPR) will consolidate the lists of all review plans and establish a mechanism for soliciting public feedback on the review plans.

II. PROJECT DESCRIPTION

A Decision Document. The purpose of the decision document entitled Blackberry Creek Critical Restoration Project Implementation Report (PIR) with Integrated Environmental Assessment (EA) and Appendices is to present the results of a feasibility study undertaken to restore the Blackberry Creek Watershed. The Blackberry Creek Critical Restoration Project is a component of Illinois River Basin Restoration. Illinois River Basin Restoration was authorized by Section 519 of the Water Resources Development Act of 2000. The feasibility phase of this project is cost shared 65/35 with the project sponsor, the Illinois Department of Natural Resources. This report provides planning, engineering, and implementation details of the recommended restoration plan to allow final design and construction to proceed subsequent to the approval of the plan.

B. General Site Description. The Blackberry Creek Watershed is located in northeast Illinois in south central Kane County and north central Kendall County. The 71 square mile watershed includes the incorporated portions of Elburn, Sugar Grove, North Aurora, Aurora, Montgomery, and Yorkville as well as unincorporated portions of Kane and Kendall Counties. Blackberry Creek originates north of Elburn in Kane County and drains to the Fox River near Yorkville, in Kendall County.

C. Project Scope. The proposed project area is in the vicinity of the Blackberry Creek Dam with project benefits accruing in the entire watershed. The dam on Blackberry Creek is located approximately 700 feet upstream from the confluence with the Fox River. The preliminary estimated total project cost is \$1.5 million.

D. Problems and Opportunities. The Blackberry Creek Dam, built in 1834, biologically disconnects Blackberry Creek from the Fox River, preventing movements of fish and other aquatic fauna from the Fox River into the portion of the creek upstream of the dam, and excluding Fox River species from utilizing potential spawning and rearing habitat in Blackberry Creek. Blackberry Creek has quality habitat with good riparian buffer and quality natural pool and riffle habitat. Several native fish species found in the Fox River have been extirpated from Blackberry Creek. The opportunity now exists to restore biological connectivity between the portion of Blackberry Creek upstream of the dam and the Fox River, thus providing access to spawning and rearing areas that could be utilized by Fox River species (some of which are threatened and endangered), as well as re-establishing extirpated fish and invertebrate populations in the creek above the dam. There is also the opportunity to improve the habitat of Blackberry Creek in the vicinity of the dam.

Peer Review Plan

E. Potential Methods. Potential methods (alternatives) for achieving the project’s goal 1 of restoring biological connectivity between Blackberry Creek and the Fox River by providing fish passage at the Blackberry Creek dam include: technical fishways (denil ladder, vertical slot and baffle ladder, pool and chute ladder), nature-like fishways (rock pool and riffle, rock ramp), partial dam removal (vertical with ladder or ramp, horizontal with ladder or ramp), and full dam removal. Potential methods (alternatives) for achieving the project’s goal 2 of restoring ecological function of Blackberry Creek near the dam include: streambank stabilization and improvement (full and partial dam removal, nature-like fishway, slope grading, riprap, and vegetation), riffle areas (nature-like fishway with riffle habitat, partial dam removal with a rock ramp), remove silt accumulated behind the dam (full and partial dam removal).

It is anticipated that the Qualitative Habitat Evaluation Index (QHEI) model will be utilized to evaluate the project alternatives. PCX will need to determine if model certification is required.

F. Product Delivery Team. The product delivery team (PDT) is comprised of those individuals directly involved in the development of the decision document. Contact information and disciplines are as follows:

Name	Discipline	Phone	Email
REMOVED	Study Manager Planning		
REMOVED	Env. Engineering/Civil Design		
REMOVED	Biology/NEPA		
REMOVED	Hydraulics/Hydrology		
REMOVED	Socio-economics		
REMOVED	Cost Engineering		
REMOVED	Real Estate/Lands		
REMOVED	Cultural Resources		
REMOVED	Geotechnical Engineering		
REMOVED	Structural Engineering		
REMOVED	Water Quality		

G. Vertical Team. The Vertical Team includes District management, District Support Team (DST) and Regional Integration Team (RIT) staff as well as members of the Planning of Community of Practice (PCoP).

District Program Manager	REMOVED
DST Manager	REMOVED
RIT Manager	REMOVED
PCoP Contact	REMOVED

III. ITR PLAN

As outlined above in Section I, the District is responsible for ensuring adequate technical review of decision documents. The responsible PDT District of this decision document is Rock Island (MVR). Since project area is within MVR and Chicago District (LRC) boundaries, an ITR team of LRC staff would be appropriate and efficient.

Peer Review Plan

A. General. An ITR Manager shall be designated for the ITR process. The proposed ITR Manager for this project is **REMOVED**. The ITR Manager is responsible for providing information necessary for setting up the review, communicating with the Study Manager, providing a summary of critical review comments, collecting grammatical and editorial comments from the ITR team (ITRT), ensuring that the ITRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ITR has been conducted and resolved in accordance with policy.

B. Team. The ITRT will be comprised of individuals that have not been involved in the development of the decision document and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT.

It is anticipated that the ITRT will consist of 11 reviewers. The ITRT members and their areas of expertise are:

Name	Discipline	Phone	Email
REMOVED	ITR Manager/Plan Formulation		
REMOVED	Civil Design		
REMOVED	Biology/NEPA		
REMOVED	Hydraulics/Hydrology		
REMOVED	Socio-economics		
REMOVED	Cost Engineering		
REMOVED	Real Estate/Lands		
REMOVED	Cultural Resources		
REMOVED	Geotechnical Engineering		
REMOVED	Structural Engineering		
REMOVED	Water Quality		

C. Communication. The communication plan for the ITR is as follows:

(1) The team will use DrChecks to document the ITR process. The Study Manager will facilitate the creation of a project portfolio in the system to allow access by all PDT and ITRT members. An electronic version of the document and appendices in Word format shall be posted at: <ftp://ftp.usace.army.mil/pub/> at least one business day prior to the start of the comment period.

(2) The PDT shall send the ITR manager one hard copy (with color pages as applicable) of the document and appendices for each ITRT member such that the copies are received at least one business day prior to the start of the comment period.

(3) The PDT shall host an ITR kick-off meeting virtually to orient the ITRT during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.

(4) The Study Manager shall inform the ITR manager when all responses have been entered into DrChecks .

(5) A revised electronic version of the report and appendices with comments incorporated shall be posted at <ftp://ftp.usace.army.mil/pub/> for use during back checking of the comments.

Peer Review Plan

(6) Team members shall contact ITRT members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.

(7) Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.

(8) The ITRT, PDT, and vertical team shall conduct an after action review (AAR) no later than three weeks after the policy guidance memo is received from HQUSACE for the AFB and draft reports.

D. Funding

(1) The PDT district shall provide labor funding by cross charge labor codes. Funding for travel, if needed, will be provided through government order. The Study Manager will work the ITR manager to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is \$15,000. Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

(2) The team leader shall provide organization codes for each team members and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes.

(3) Reviewers shall monitor individual labor code balances and alert the ITRT Study Manager to any possible funding shortages.

E. Timing and Schedule

(1) Throughout the development of this document, the team will hold planning charrettes to ensure planning quality. Senior staff and subject matter experts from the PDT District and members of the vertical team (as needed) will attend the charrettes and provide comments on the product to date.

(2) The ITR will begin once a recommended plan has been selected, the preliminary design is complete, and the environmental assessment has been performed.

(3) The PDT will hold a "page-turn" session to review the draft report to ensure consistency across the disciplines and resolve any issues prior to the start of ITR. Writer/editor services will be performed on the draft prior to ITR as well.

(4) The ITR process for this document will follow the timeline below. Actual dates will be scheduled once the period draws closer. It is estimated that review of AFB pre-conference document will begin in the 1st Quarter of FY 2008:

Peer Review Plan

Task	Date
ITR of Draft Report Comment Period	Begin Week 1
Kickoff Meeting	Week 1
ITR Comments	Due Week 4
PDT Responses	Due Week 6
Responses Backcheck	Week 8
Certification	Week 10
Alternative Formulation Briefing (AFB)	Week 14
AFB Policy Memo Issued	Week 18
After Action Review	NLT Week 20
Policy Guidance Memo	Week 23
Public Review of Draft Report	Begin Week 25
Final Report	Completed Week 40

F. Review

ITR Team responsibilities are as follows:

- Reviewers shall review the draft report to confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.
- Reviewers shall pay particular attention to one's discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.
- Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to ITR manager via electronic mail using tracked Changes feature in the Word document or as a hard copy mark-up. The ITR manager shall provide these comments to the Study Manager.
- Review comments shall contain these principal elements:
 - A clear statement of the concern;
 - The basis for the concern, such as law, policy, or guidance;
 - Significance for the concern; and
 - Specific actions needed to resolve the comment
- The "Critical" comment flag in DrChecks shall not be used unless the comment is discussed with the ITR manager and/or the Study Manager first

PDT Team responsibilities are as follows:

- The team shall review comments provided by the ITRT in DrChecks and provide responses to each comment using "Concur", "Non-Concur", or "For Information Only". *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.
- Team members shall contact the PDT and ITRT managers to discuss any "non-concur" responses prior to submission.

G. Resolution

- Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve any conflicting comments and responses.
- Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. ITRT members shall keep the ITR manager informed of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during Headquarter review.

H. Certification. To fully document the ITR process, a statement of technical review will be prepared. Certification by the ITR manager and the Study Manager will occur once issues raised by the reviewers have been addressed to the review team’s satisfaction. Indication of this concurrence will be documented by the signing of a certification statement (see attachment). A summary report of all comments and responses will follow the statement and accompany the report throughout the report approval process.

I. Alternative Formulation Briefing (AFB). The AFB for this project will occur after ITR certification. It is possible that the briefing will result in additional technical or policy comments from higher level reviewers for resolution. After resolution of significant comments, the ITR will be recertified, if needed. Re-certification will be needed if resolution significant policy comments result in major changes to the document.

IV. EPR PLAN

A. This decision document will present the details of a feasibility study undertaken to restore the Blackberry Creek Watershed as described in paragraph 2 above. This critical restoration project is part of a larger program aimed at restoration of the Illinois River Basin. This project does not meet the EPR standards outlined in the Circular.

- **Project Magnitude.** The magnitude of this project is determined as low. The cost of the project will likely not exceed \$2.0 million. It is assumed that the amount of benefits accrued by the project will be worth the cost because work at a single dam will provide access to critical habitat for multiple species along the 32 miles of the stream and access between these areas and the Fox River. The scale of the project is limited because the project footprint is limit (under 5 acres) but will still contribute to the overall goal of the program. The project is not considered complex and involves restoration of aquatic habitat through the implementation of standard concepts. The project will likely have positive long term and cumulative effects. It is anticipated that the report will not present influential scientific information or influential scientific assessments, thus only an ITR is anticipated to be required.
- **Project Risk.** This project is considered low risk overall. The potential for failure is low because restoration of biological connectivity at dams is a straight forward concept with numerous successful applications. The potential for controversy regarding project implementation is low because the recommended plan will take into account the public concerns regarding dam removal. A socio-economic analysis will be prepared and at least one

public meeting will be held. The uncertainty of success of the project is low because the methods used for evaluating the project are standard and the concept of implementing fish passage is not innovative. The ecosystem has not reached an irreversible state so it is likely that a restoration effort of the magnitude proposed will be successful.

- **Vertical Team Consensus.** **REMOVED** of Mississippi Valley Division representing the vertical team concurred (personal communication dated 28 September 2007) that the subject matter covered in the decision document is NOT novel, controversial, or precedent-setting and the project will not have significant interagency interest or significant economic, environmental or social effects.

Therefore, a separate EPR will not be conducted on the decision document and external members will not be part of the ITR team. The ITR and Public and Agency Reviews will serve as the main review approaches.

V. PUBLIC AND AGENCY REVIEWS

- Public review of the document will occur after issuance of the AFB policy guidance memo and concurrence by HQUSACE that the document is ready for public release. As such, public comments other than those provided at any public meetings held during the planning process will not be available to the review team.
- Public review of the draft report will begin approximately 1 month after the completion of the ITR process and policy guidance memo. The period will last 30 days as required by ER 200-2-2.
- The public review of necessary state or Federal permits will also take place during this period.
- A formal state and Agency review will occur concurrently with the public review. However, it is anticipated that intensive coordination with these agencies will have occurred concurrent with the planning process. Possible public concern issues are dam removal, loss of pool, land condemnation, and invasive species introduction. Possible state and Agency issues are concern over sediment flushing, permitting complications due to water quality concerns, and loss of a small amount of wetland acreage if the dam is removed. Possible coordinating parties' issues are dam ownership, historical significance of the dam and adjacent land use.
- Upon completion of the review period, comments will be consolidated in a matrix and addressed, if needed. A comment resolution meeting will take place if needed to decide upon the best resolution of comments. A summary of the comments and resolutions will be included in the document.

VI. PCX COORDINATION

The appropriate PCX for this document is the National Ecosystem Planning Center of Expertise located at MVD. This review plan will be submitted through the PDT District (MVR) Planning Chief, to the PCX Director, Rayford Wilbanks, and PCX Deputies, Dr. David Vigh and Susan Smith, for

*Blackberry Creek Watershed
Critical Restoration Project
Project Implementation Report With
Integrated Environmental Assessment*

Peer Review Plan

approval. Since it was determined that this project is low magnitude and low risk, an EPR will not be required. As such, the PCX will not be asked to manage the review, but is requested to review and comment on the sufficiency of the ITR team proposed in paragraph 3.b. above. The approved review plan will be posted to the PCX website. Any public comments on the review plan will be collected by the Office of Water Project Review (OWPR) and provided to the PDT District for resolution and incorporation if needed.

VII. APPROVALS

The PDT will carry out the review plan as described. The Study Manager will submit the plan to the PDT District Planning Chief for approval. Coordination with PCX will occur through the PDT District Planning Chief. Signatures by the individuals below indicate approval of the plan as proposed.

**BLACKBERRY CREEK WATERSHED
CRITICAL RESTORATION PROJECT
PROJECT IMPLEMENTATION REPORT WITH
INTEGRATED ENVIRONMENTAL ASSESSMENT**

ATTACHMENT

STATEMENT OF TECHNICAL REVIEW

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

The Army Corps of Engineers, Rock Island District has completed the project implementation report (feasibility report) with integrated environmental assessment and appendices of the Blackberry Creek Watershed Critical Restoration Project. Notice is hereby given that an independent technical review, that is appropriate to the level of risk and complexity inherent in the project, has been conducted as defined in the Review Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level obtained; and reasonableness of the result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The independent technical review was accomplished by an independent team composed of Chicago District staff. All comments resulting from ITR have been resolved.

REMOVED
Team Leader, Blackberry Creek Project
Independent Technical Review Team

Date

REMOVED
Study Manager, Blackberry Creek Watershed Project

Date

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

A summary of all comments and responses are attached. Significant concerns and the explanation of the resolution are as follows:

(Describe the major technical concerns, possible impact and resolution)

As noted above, all concerns resulting from the independent technical review of the project have been fully resolved.

REMOVED
Acting Chief, Planning and Policy Branch
Rock Island District

Date